



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/510,697	11/29/2004	Gerardo Gomez Paredes	60282.00211	4314
32294 7590 02/06/2008 SQUIRE, SANDERS & DEMPSEY L.L.P. 14TH FLOOR 8000 TOWERS CRESCENT TYSONS CORNER, VA 22182			EXAMINER KAO, JUTAI	
			ART UNIT 2616	PAPER NUMBER
			MAIL DATE 02/06/2008	DELIVERY MODE PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/510,697	<b>Applicant(s)</b> GOMEZ PAREDES ET AL.	
	<b>Examiner</b> Ju-Tai Kao	<b>Art Unit</b> 2616	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 16 November 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1-9 is/are pending in the application.
- 4a) Of the above claim(s) 6-9 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-5 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 10/08/2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)  | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date <u>10/08/2004</u> . | 6) <input type="checkbox"/> Other: _____  |

## **DETAILED ACTION**

### ***Election/Restrictions***

In the response to the restriction received on 11/16/2007, the applicant elected group I of claims 1-5. Therefore, for the purpose of this office action, claims 1-5 are examined and claims 6-9 are withdrawn from considerations.

### ***Claim Objections***

1. Claim 1 and 5 are objected to because of the following informalities: grammatical errors.
2. Claim 1 recites "a translation function means adapted to translate said rules in a form executable...", which, according to the specification, seems to mean "translate said rules into a form executable..." instead of translating said rules in a form executable.
3. Claim 5 recites "policy repository means for containing the policies defined an administrator...", in which it is believed that it is the "policies defined by an administrator".
4. Appropriate correction is required.

### ***Claim Rejections - 35 USC § 112***

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Claim 4 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

3. Claim 4 recites the limitation "said control center device" in line 2. There is insufficient antecedent basis for this limitation in the claim. It is noted that the parent claim recites control center means and a policy management device. It is unclear which device is being referred to as the "said control center device".

***Claim Rejections - 35 USC § 103***

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

6. Claims 1, 2 and 4 are rejected under 35 U.S.C. 103(a) as being unpatentable over Naveh (US 6,466,984) in view of Blight ("Policy-Based networking architecture for QQOS interworking inn IP management-scalable architecture for large scale enterprise-public interopration". Integrated Network Management V. Integrated Management in a Virtual World. Proceedings of the IFIP/IEEE International Symposium on Integrated Network Management, 1999, pages 813-826, XP002179101, which is a non-patent literature received in the IDS filed by the applicant on 10/08/2004).

Regarding claim 1, a system for providing a policy based Quality-of-Service management (see "policy-based management" recited in the first line of the abstract) in multi-radio access mobile networks (see network shown in Fig. 2, which may include wireless links as shown in column 17, line 21), comprising: control center means for administrating said radio access network, thereby controlling the behavior thereof (see "administrator station 220" recited in column 7, line 26 and policy server 216 shown in Fig. 2; also see "a network administrator...may map application parameters into network services..." recited in column 9, line 42-45), wherein an information model is implemented in said control center means which describes different Quality-of-Service mechanisms (see "mappings representing...network quality of service..." recited in column 5, line 25-28) including attributes which are involved in each function under policy thus representing the manageable parameters of specific network implementations (see "application-specific parameters" recited in column 9, line 18-28), and wherein said information model forms the basis of a set of policy rules defining actions to be executed in dependency of the occurrence of conditions (see "each policy

statement associates a condition of one of the traffic flows...and an action comprising one of the quality of service treatments” recited in column 6, line 10-14); and a policy based management device (policy server 604 or network device 620 in Fig. 6A) adapted to receive said set of rules for the implementation thereof (see “Policy Server 604...map application parameter into network services...” recited in column 9, line 42-45, that is, the policy servers may receive policy rules stored in the policy repository), said device having, a plurality of policy based radio resource management means each adapted for managing said parameters of specific network implementations (see “Policy Server 604 configures the network devices 620 to implement the network services and to correctly respond to signaling from application 608” recited in column 9, line 56-67, that is, the devices 620 are the radio resource management means), and a translation function means adapted to translate said rules in a form executable by said plurality of policy based radio resource management means (see “abstract definitions of services that are later translated into a specific configuration of network device” recited in column 15, line 36-44).

Regarding claim 2, wherein said set of rules is implemented in a policy server (see “Policy Server 604 provides a mechanism by which a network administrator or manager may map application parameters into network services...” recited in column 9, line 42-45 of the Policy system section, thus, the policy server implements the policy by allowing the management of the parameters, in addition, see the “Repository 600 stores policies...” recited in column 9, line 4-6, and the Repository could also be considered a policy server).

Regarding claim 4, wherein said control center device further comprises a configuration data base for storing said parameters (see "storing one or more mappings comprises registering one or more application codepoints, which are associated with traffic flow types, in the repository..." recited in column 5, line 36-50; and see "storing...conditions of one of the traffic flows...and an action..." recited in column 6, line 15-26).

Naveh does not disclose the following features: wherein the translating function means is included in said device (or the policy server of Naveh's invention).

Blight discloses a policy-based network architecture for QoS interworking in IP management including the following features.

Regarding claim 1, wherein the translating function means is included in the policy server (see "a policy server to interpret policy" recited on page 817, third paragraph).

It would have been obvious to one of the ordinary skill in the art at the time of the invention to modify the system of Naveh using features, as taught by Blight, in order to provide policy parameters to the network devices.

7. Claims 3 and 5 are rejected under 35 U.S.C. 103(a) as being unpatentable over Naveh and Blight as applied to claim 1 above, and further in view of Wright (US 7,082,102).

Naveh and Blight disclose the claimed limitations.

Naveh also discloses the following features.

Regarding claim 5, policy enforcement means representing entities whose behavior is going to be managed by said policy means (see local policy enforcer 210 shown in Fig. 3); policy decision means for defining a group of functionalities in charge of acquiring, deploying and translating said policy rules into a form executable by said policy enforcement means (see "policy server 604 provides a mechanism by which a network administrator or manager may map application parameters..." recited in column 9, line 42-67); policy repository means for containing the policies defined an administrator of said radio access networks (see policy repository 600 in Fig. 6A); management information base means for informing about the behavior of said policy enforcement means (see traffic flow state machine 310, which keeps track of the behavior, and communication engine 312, which communicates the behavior to the policy server, in Fig. 3).

Naveh and Blight do not disclose the following features: regarding claim 3, wherein said control center means comprises a user interface for entering and/or selecting a policy according to a specific subset of rules; regarding claim 5, policy information base means for containing possible rules of all relevant functions of a specific policy enforcement means so that said rules can be downloaded by said policy decision means into said policy enforcement means

Wright discloses a system for policy-enabled communication networks.

Regarding claim 3, wherein said control center means comprises a user interface for entering and/or selecting a policy according to a specific subset of rules (see "a policy management console ("PMC") 100 to provide a human interface to the policy



system...PMC 100 can be used to generate policies...and to administer the distribution of policies..." recited in column 2, line 44-50).

Regarding claim 5, policy information base means (see "Policy Information Base" recited in column 3, line 32) for containing possible rules of all relevant functions of a specific policy enforcement means (see "Policy Enforcement Point" recited in column 2, line 40) so that said rules can be downloaded by said policy decision means (see "Policy Decision Means" recited in column 2, line 40) into said policy enforcement means.

It would have been obvious to one of the ordinary skill in the art at the time of the invention to modify the system of Naveh and Blight using features, as taught in Wright, in order to provide the correct policy to the local network devices.

### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ju-Tai Kao whose telephone number is (571)272-9719. The examiner can normally be reached on Monday ~Friday 7:30 AM ~5:00 PM EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kwang Yao can be reached on (571)272-3182. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Application/Control Number:  
10/510,697  
Art Unit: 2616


Page 9

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Ju-Tai Kao

A handwritten signature in black ink, appearing to be 'Ju-Tai Kao', written in a cursive style.

**KWANG BIN YAO**  
SUPERVISORY PATENT EXAMINER

A handwritten signature in black ink, appearing to be 'Kwang Bin Yao', written in a cursive style.